**Homework 37 Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Simplify Cube Roots Period:\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**SHOW ALL WORK AND WRITE IN COMPLETE SENTENCES OR ELSE LASALLE MUAHAHAHA.**

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| 1) What is the cubed root of 729?   1. 9 2. 10 3. 243 4. 726 | 2) Which of the following statements best describes the cubed root of a number *x*, or ?   1. A number that is equal to *x* when it is multiplied by 3 2. A number that is equal to *x* when it is divided by 3 3. A number that is equal to *x* when it is cubed 4. A number that is equal to *x* when it is squared |
| 3) The volume of a standard, six-sided number cube used in dice games is 3.375 cm3. What is the length of one side of the number cube?   1. 0.563 cm 2. 1.125 cm 3. 1.5 cm 4. 1.7 cm | 4) |
| 5) Simplify: | 6) Simplify: |
| 7) Simplify: | 8) Simplify: |
| 9) Simplify: | 10) |

Review:

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| 11) Simplify: | 12) Simplify: |
| 13) Simplify: | 14) Simplify: |
| 15) For all real numbers x and y, simplify the expression (2x + 3y)2 | 16) Which of the following is a factor of x2 + 7x - 18?   1. x – 2 2. x – 3 3. x – 9 4. x + 2 5. x – 6 |
| 17) Linoleum floor tiles are each 1-foot square. What is the minimum number of these tiles needed to tile the entire floor of a 12-foot-by-14-foot rectangular kitchen and a 12-foot-by-4-foot rectangular hallway? | 18) Simplify: |
| 19) In the standard (x, y) coordinate plane, a line satisfies the equation:  y = -2x + 4  At what coordinate point does that line cross the x-axis? | 20) An object is launched at 64 feet per second (ft/s) from a platform 80 feet high. After how many seconds after launch will the object hit the ground?  *Identify the correct quadratic equation and solution.*   1. s(t) = –16s2  + 64s – 80; 5 seconds 2. s(t) = –16s2  + 64s + 80; 5 seconds 3. s(t) = –16s2  + 64s + 64; 4.82 seconds 4. s(t) = –16s2  + 80s + 64; 5.70 seconds 5. None of the above |